# **DIVISION OF WATER RESOURCES**

# DEPARTMENT OF NATURAL RESOURCES

#### **DIVISION OF WATER RESOURCES**

### IMPLEMENTATION OF SUBSECTION 25-8-202(7), C.R.S.

#### 2 CCR 402-8

#### **EDITOR'S NOTES\***

Authority Cited:

See page 1.

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# RULES AND REGULATIONS FOR THE IMPLEMENTATION OF SUBSECTION 25-8-202(7), C.R.S. "SENATE BILL 89-181 RULES"

等的人,只是**就**有一个人,就可以这些话,这一个人也是就是有人的。

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## RULES AND REGULATIONS FOR IMPLEMENTATION OF SUBSECTION 25-8-202(7), C.R.S.

#### RULE 1 TITLE

1.1 The title of these rules and regulations is "The Rules and Regulations for Implementation of Subsection 25-8-202(7), C.R.S." The short title for these rules and regulations is "Senate Bill 181 Rules."

#### RULE 2 AUTHORITY

These rules and regulations are promulgated pursuant to the authority granted the State Engineer in Sections 37-80-102(1)(g) and (k), and 25-8-202(7)of the Colorado Revised Statutes, as amended by Senate Bill 89-181.

#### RULE 3 SCOPE AND PURPOSE

- 3.1 These rules and regulations are required to enable the State Engineer to carry out the provisions of C.R.S. 25-8-202(7), enacted June 8, 1989 by the General Assembly.
- 3.2 These rules apply to those situations where the State Engineer has water quality authority under a statute other than the Colorado Water Quality Control Act, or more specifically, sections 37-80-120, 37-90-137(2), 37-91-101, 37-91-104(1) and (2), 37-91-110, and 37-92-305(5), of the Colorado Revised Statutes.
- 3.3 These rules establish procedures on how and when the State Engineer will implement water quality standards and classifications for discharges to state waters, other than permitted point source discharges to surface water and discharges to designated ground water, for those activities subject to the jurisdiction of the State Engineer.
- 3.4 These rules establish points of compliance applicable to those activities regulated by the State Engineer.
- 3.5 Per the provisions of C.R.S. 25-8-202(7), the State Engineer shall implement, as provided in these regulations, the standards and classifications established by the Water Quality Control Commission, in those instances where the State Engineer has statutory water quality authority under a statute other than C.R.S. 25-8-202(7). However, pursuant to C.R.S. 25-8-202(7)(d), this subsection (7) is not intended either to grant additional jurisdiction to any agency or to curtail the jurisdiction of any agency to fulfill its statutory responsibilities.
- 3.6 Pursuant to C.R.S. 25-8-104(1), no provisions in these rules, as they pertain to Article 8, Title 25 of the Colorado Revised Statutes, shall be interpreted so as to supersede, abrogate, or impair rights to divert water and apply water to beneficial uses in accordance with the provisions

of Sections 5 and 6 of Article XVI of the Constitution of the State of Colorado, compacts entered into by the State of Colorado, or provisions of articles 80 to 92 of Title 37, C.R.S, or Colorado court determinations with respect to the determination and administration of water rights. Nothing in these rules, as they pertain to Article 8, Title 25 of the statutes, shall be construed, enforced, or applied so as to cause or result in material injury to water rights.

#### RULE 4 DEFINITIONS

- 4.1 Statutory Definitions The terms listed below are defined by statute and have the identical meaning as in the referenced statutes:
  - 4.1.1 Water Right Determination and Administration Act of 1969, C.R.S. 37-92-103: Beneficial use, divert, diversion, plan for augmentation, water right, and waters of the state.
  - 4.1.2 Water Quality Control Act, C.R.S. 25-8-103: Control regulation, point source promulgate, state waters, and water quality standard, .
  - 4.1.3 Colorado Ground Water Management Act, C.R.S. 37-90- 103(21): Well.
  - 4.1.4 C.R.S. 37-91-102: Board and well.
- 4.2 Definitions from other rules The terms listed below are defined in other rules and have the identical meaning as in the referenced rules:
  - 4.2.1 Rules and Regulations of the Board of Examiners of Water Well Construction and Pump Installation Contractors; 2 CCR 402-2(1988): Casing.
- 4.3 Definitions:
- "Beneficial Use" is the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made and, without limiting the generality of the foregoing, includes the impoundment of water for recreational purposes, including fishery or wildlife. For the benefit and enjoyment of present and future generations, "beneficial use" shall also include the appropriation by the state of Colorado in the manner prescribed by law of such minimum flows between specific points or levels for and on natural streams and lakes as are required to preserve the natural environment to a reasonable degree.
- (2) "Board" means the Board of Examiners of Water Well Construction and Pump Installation Contractors.

- (3) "Casing" means the pipe installed in the borehole or excavation to provide unobstructed access to the water bearing formation. The term includes both nonperforated and perforated pipe and screen.
- (4) "Control Regulation" means any regulation promulgated by the Water Quality Control Commission pursuant to C.R.S. 25-8-205.
- (5) "Divert" or "Diversion" means removing water from its natural course or location, or controlling water in its natural course or location, by means of a ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device.
- (6) "Implementing Agency" refers to any of the state agencies mentioned as such in C.R.S. 25-8-202(7).
- (7) "Mass Balance Analysis" refers to a fundamental engineering approach used to quantify the chemical changes that take place in some definable water body. The mass balance equation is:

M2 = (M3Q3 - M1Q1)/Q2

Where:

Q1 = Upstream low flow

Q2 = Average flow of the source as it enters the waterway

Q3 = Q1 + Q2 = Downstream flow

M1 = Upstream pollutant concentration

M2 = Known or unknown pollutant concentration

M3 = Known pollutant concentration, calculated resulting pollutant concentration,

or Water Quality Standard of pollutant

Q3 may be measured at the location of the use to which the senior appropriation has normally been put, or at or near the point where the substituted supply enters the waterway. If Q3 is measured at the point of use of the senior appropriator, additional known quantities, with known concentrations of constituents, must be used if necessary to account for accretions and depletions between the point where the substitute supply is introduced and the location of use of the senior appropriation. This data must be provided by the applicant for the exchange, plan for augmentation, or substitute supply plan, if the applicant chooses to use the mass balance equation to show that the quality of water meets the requirements of use to the senior appropriator.

(8) "Mixing Zone" is that portion of a water body designated on a case-by-case basis by the State Engineer which is contiguous to a discharge of an activity regulated by the State Engineer and in which the water quality standards may not apply. The mixing zone is intended to serve as a zone of dilution between the place of introduction of a substitute supply and the point of diversion of the senior appropriator or, in the case of an existing water quality standard, in the

immediate area of a discharge.

- (9) "Plan for Augmentation" means a detailed program to increase the supply of water available for beneficial use in a diversion or portion thereof by the development of new or alternate means or points of diversion, by a pooling of water resources, by water exchange projects, by providing substitute supplies of water, by the development of new sources of water or by any other appropriate means. "Plan for augmentation" does not include the salvage of tributary waters by the eradication of phreatophytes, nor does it include the use of tributary water collected from land surfaces which have been made impermeable, thereby increasing the runoff but not adding to the existing supply of tributary water.
- (10) "Point of Compliance" means one or more points or locations at which compliance with applicable ground water standards is the goal. For further definition see Rule 5.1.
- (11) "Point Source" as defined in C.R.S. 25-8-103(14) means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. "Point source" does not include irrigation return flow. Pursuant to C.R.S. 25-8-503(5), point source discharges of pollution, under Article 25, Section 8, do not include activities such as diversion, carriage, and exchange of water from or into streams, lakes, reservoirs, or conveyance structures, or storage of water in or the release of water from lakes, reservoirs, or conveyance structures, in the exercise of water rights.
- (12) "Promulgate" means and includes authority to adopt, and from time to time, amend, repeal, modify, publish, and put into effect.
- (13) "Replacement Well" means a new well which replaces an existing well, and which shall be limited to the yield of the original well and shall take the date of priority of the original well, which shall be abandoned upon completion of the new well.
- (14) "State Waters" pursuant to C.R.S. 25-8-103(19) means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.
- (15) "Waters of the State" pursuant to C.R.S. 37-92-103(13) means all surface and underground water in or tributary to all natural streams within the state of Colorado, except waters referred to in C.R.S. 37-90-103(6).
- (16) "Well" as defined in C.R.S. 37-90-103(21) means any structure or device used for the purpose or with the effect of obtaining ground water for beneficial use from an aquifer. For the purposes of Article 91, Section 37, "well" means any test hole or other excavation that is drilled,

cored, bored, washed, fractured, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, monitoring, dewatering, observation, diversion, artificial recharge, or acquisition of ground water or for conducting pumping equipment or aquifer tests. This definition of "well" does not include certain types of monitoring and observation wells, dewatering wells, and test holes that the board specifies in rules and regulations in order to allow for their construction, utilization, and abandonment by other than a well construction contractor, nor does such term include an excavation made for the purpose of obtaining or prospecting for minerals or those wells subject to the jurisdiction of the oil and gas conservation commission, as provided in Article 60 of Title 34, C.R.S., or those wells subject to the jurisdiction of the division of mined land reclamation, as provided in Article 33 of Title 34, C.R.S.

- (17) "Water Right" means a right to use in accordance with its priority a certain portion of the waters of the state by reason of the appropriation of the same.
- (18) "Water Quality Standard" means any standard promulgated pursuant to C.R.S. 25-8-204.
- (19) "Water Quality Classification" means any classification promulgated pursuant to C.R.S. 25-8-203. Examples of water quality classifications include, but are not limited to, the following uses: domestic, agricultural, aquatic life and recreational.

#### RULE 5 POINTS OF COMPLIANCE FOR DISCHARGES TO GROUND WATER

- 5.1 Pursuant to C.R.S. 25-8-202(7), points of compliance shall be adopted through rule-making for activities subject to the jurisdiction of the implementing agencies that result in discharge to state waters other than surface waters.
- 5.2 The State Engineer has certain water quality authority over activities subject to his jurisdiction as stated in Rule 3.2.
- For well permitting and licensing activities pursuant to C.R.S. 37-90-137(2), 37-91-101, 37-91-104(1), and 37-91-110, the promulgation of the Board of Examiners of Water Well Construction and Pump Installation Contractors Rules and Regulations, 2 CCR 402-2(1988), and any variances thereto, incorporated herein by reference, ensure that these activities do not result in a discharge to state waters.
- 5.4 All water wells shall be drilled and constructed in a manner to protect against contamination and pollution of aquifers pursuant to C.R.S. 37-90-137(2), 37-91-101, and 37-91-110 and the Rules and Regulations of the Board of Examiners of Water Well Construction and Pump Installation Contractors.
- 5.5 For those activities conducted pursuant to the water quality provisions of C.R.S. 37-80-120

and 37-92-305(5) which may result in discharges to ground water;

- 5.5.1 where the substitute supply is discharged in a pit, excavation or discretely identifiable location, the point of compliance shall be located at the boundary of the area of the spreading basin or the area physically disturbed by the construction of the pit or excavation.
- 5.5.2 where the substitute supply is discharged over a large area, the point or points of compliance may be located adjacent to the discharged area or, where appropriate, at another location downgradient where representative samples may reasonably be obtained, provided that intervening senior appropriator's requirements of use have been met. In no event shall a point of compliance be located farther away than where the discharge to groundwater enters a surface stream.

See Rules 6 and 7 for methods of implementation of standards and classifications at these points of compliance.

5.6 The point of compliance described in Rule 5.5 shall not apply to activities regulated by the Water Quality Control Commission, Water Quality Control Division, or other implementing agencies.

# RULE 6 IMPLEMENTATION OF STANDARDS AND CLASSIFICATIONS FOR NONDECREED EXCHANGES AND SUBSTITUTE SUPPLY PLANS

- Pursuant to C.R.S. 37-80-120(3), the State Engineer has the authority, in reviewing applications for approval of nondecreed exchanges and substitute supply plans, to require that the substitute supply shall be of a quality to meet the requirements of use to which the senior appropriation receiving the substituted supply has normally been put.
- 6.2 Pursuant to C.R.S. 37-80-120(3), the State Engineer shall determine whether the substitute supply is of a quality to meet the requirements of use to which the senior appropriation has normally been put.
- 6.3 The State Engineer may reasonably require the applicant to provide water quality data and analysis or other information to properly evaluate and analyze the quality of the substitute supply and assure the requirements of use of the senior appropriator are met. If such water quality data and analysis or other information requested by the State Engineer is not provided within 30 days of request, or an extension of time thereof, the nondecreed exchange or substitute supply plan shall be denied. Denial shall not impair the timely evaluation of a resubmitted request for a nondecreed exchange or substitute supply plan with the requested data.
- 6.4 In the evaluation and analysis of the quality of the substitute supply and in implementing

the provisions of Rule 3.6, the State Engineer may require and utilize some or all of the following information and criteria or other criteria and information deemed appropriate:

- 6.4.0 Evaluation of engineering reports, data, and other information provided by the applicant.
- 6.4.1 Investigation and evaluation of the use to which the senior appropriation has normally been put.
- 6.4.2 Information and records from Water Division Engineers, Water Commissioners, and downstream vested water users.
- 6.4.3 Evaluation of water quality data of the substitute supply or the receiving waters at or near the point where the substitute supply enters the waterway or aquifer.
- 6.5 In the evaluation and analysis of the quality of the substitute supply and in determining whether to grant or deny a proposed nondecreed exchange or substitute supply plan, the State Engineer shall apply the following provisions:
- 6.5.0 Pursuant to C.R.S. 37-80-120(3), the substituted water shall be of a quality to meet the requirements of use to which the senior appropriation receiving the substituted supply has normally been put.
  - 6.5.1 Nondecreed exchanges and substitute supply plans reviewed by the State Engineer, which do not meet the requirements of use to the senior appropriator, are subject to denial by the State Engineer.
  - 6.5.2 If appropriate water quality standards and/or classifications have been established by the Water Quality Control Commission, they shall be considered in determining water requirements of senior appropriators and the State Engineer shall consider the water quality standards for the use which is appropriate to the senior appropriator. For example, if the senior beneficial use is agricultural in nature, then the appropriate standards for agricultural use may be applied, if such criteria have some factual correlation to the particular use of the senior appropriator.

A mass balance analysis or mixing zone approach may be used to determine if the water quality standards are met for the senior appropriator's use .

- 6.5.3 The State Engineer shall consider water quality standards and classifications only if the Water Quality Control Commission has established standards and/or classifications for the beneficial use in question.
- 6.5.4 If as a result of the evaluation and analysis of the quality of the proposed

substitute supply pursuant to Rule 6, the State Engineer finds the requirements of use of the senior appropriator have been met, but the quality of the substitute supply fails to meet water quality standards, the State Engineer shall approve the nondecreed exchange or substitute supply plan if other statutory requirements of C.R.S. 37-80-120 are met. Notification of such an approval shall be reported to the Water Quality Control Commission and where appropriate the Department of Agriculture.

- 6.5.5 Substitute supply plans approved by the State Engineer, prior to the effective date of these rules, shall be presumed to meet water quality standards, however, upon request for renewal, the substitute supply plan shall be re-evaluated to assure the substitute supply meets the requirements of use of the senior appropriator receiving the substituted supply.
- 6.5.6 The State Engineer shall, under normal circumstances, consider proof of the following substitute supplies as evidence that the requirements of use to which a senior appropriation has normally been put will be met:
  - 6.5.6.1 Water discharged to surface streams in compliance with either a valid state discharge permit or with the applicable water quality standards under these Rules, where the applicable stream classifications include all uses to which the senior appropriation has normally been put and the standards include all parameters necessary to protect the requirements of use of the senior appropriator;
  - 6.5.6.2 Water supplies treated in accordance with the Safe Drinking Water Act and in compliance with the drinking water standards of the state and applied to lawns for irrigation;
  - 6.5.6.3 Surface water left in the stream by foregoing diversion or diverted from the stream but returned from the same diversion or measuring facility without alteration of quality for use as a substitute supply.
  - 6.5.6.4 Water from any stream or other source that is designated by the Water Quality Control Commission as "High Quality".

## RULE 7 IMPLEMENTATION OF STANDARDS AND CLASSIFICATIONS FOR DECREED EXCHANGES AND PLANS FOR AUGMENTATION

7.1 Pursuant to C.R.S. 37-92-305(5), applications to the Water Court for augmentation plans including exchanges in which any substituted water may not meet the requirements for which the water of the senior appropriator has normally been used may be opposed by the State Engineer in the form of a Statement of Opposition, Protest to Referee's Ruling, or Motion to Intervene in Water Court.

If the State Engineer files a Statement of Opposition, Protest to Referee's Ruling, or Motion to Intervene in Water Court, for the reasons described above, the State Engineer may utilize some or all of the following sources to evaluate the plan, or other sources as appropriate:

- 7.1.0 Evaluation of engineering reports, data, and other information provided by the applicant or others.
- 7.1.1 Investigation and evaluation of the use to which the senior appropriation has normally been put .
- 7.1.2 Information and records from Division Engineers, Water Commissioners, and water users.
- 7.1.3 Evaluation of water quality data of the substitute supply or the receiving waters at or near the point where the substitute supply enters the waterway or aquifer.
- 7.2 If the State Engineer elects to file a Statement of Opposition, Protest to Referee's Ruling, or Motion to Intervene in Water Court, for the reasons described in Rule 7.1 above, the State Engineer shall apply the following provisions in evaluating the plans as is appropriate:
  - 7.2.1 If appropriate water quality standards and/or classifications have been established by the Water Quality Control Commission, they shall be considered in evaluating water requirements of senior appropriators. For example, if the senior beneficial use is agricultural in nature, then the appropriate standards for agricultural use may be applied, if such criteria have some factual correlation to the particular use of the senior appropriator.

A mass balance analysis or mixing zone approach may be used to consider whether the water quality standards are met for the senior appropriator's use.

- 7.2.2 The State Engineer shall consider water quality standards and classifications only if the Water Quality Control Commission has established standards and/or classifications for the beneficial use in question.
- 7.3 If the **State** Engineer elects to file a Statement of Opposition, Protest to Referee's Ruling, or Motion to Intervene for water quality related issues, the State Engineer shall report such entry to the Water Quality Control Commission.
- 7.4 Existing decrees shall not be affected by enactment of this regulation except to the extent consistent with retained jurisdiction provisions in such decrees, or water quality obligations of the State Engineer's Office pursuant to such decrees. When construing the State Engineer's obligations pursuant to such a decree, the State Engineer shall consider all the determinations made by the court in entering the decree.

#### RULE 8 VARIANCES

- 8.1 Written Requests Variances to these rules may be granted by the State Engineer upon written request and a showing by the applicant that the requested variance will comply with the intent of these rules to protect the public safety, health and environment, and ensure that requirements of the senior appropriator's use shall be met, subject to Rule 3.6.
- 8.2 Written Response The State Engineer shall approve or deny the variance request in writing within 60 days of receipt thereof. The reasons for the decision shall be given and conditions necessary to implement the intent of these rules may be imposed.

#### RULE 9 SEVERABILITY

9.1 If any portion of these rules is found to be invalid, the remaining portion of the rules shall remain in force and not be affected.

#### RULE 10 REVISIONS

10.1 These rules may be revised in accordance with C.R.S. 24-4-103.

#### RULE 11 STATEMENT OF BASIS AND PURPOSE INCORPORATED BY REFERENCE

11.1 The Statement of Basis and Purpose for these Senate Bill 89-181 Rules is incorporated by reference as part of these rules.

#### RULE 12 EFFECTIVE DATE

12.1 These rules shall become effective on March 30, 1992.